

# Work Order ID 81684

March-16-12 1:58:56 PM

**\*81684\***

Page 1

Item ID: D5957

Revision ID:

Item Name: Saddle, 205

Start Date: 16/03/2012 Start Qty: 6.00

Required Date: 22/03/2012 Req'd Qty: 6.00

Reference:

Accept

**\*N9000040100\***

Setup Start **\*NS1\***

Stop **\*NS2\***

Cust Item ID:

Customer:

Approvals: Process Plan: MLJ

Date: 12/03/16

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start **\*NR1\***

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr                       | Revision Nbr             |                      |         |        |              |               |               |                  |                |
| D5957                          | Rev B                    |                      |         |        |              |               |               |                  |                |

100

HAAS CNC VERTICAL MACHINING #1

0.00

**\*100\***

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine as per folio D5957, Ensure Batch Number is entered  
2-Machine Keyway  
3-Deburr & Tumble

B.A 12/06/21

8 0

110

QC1- Inspect dimensions to dimension sheet

0.00

**\*110\***

QC

Memo

0.00

Quality Control

B.A 12/06/21

8 0

120

QC8- Inspect parts - second check

0.00

**\*120\***

QC

Memo

0.00

Quality Control

on 12/06/24

8 0

Work Order ID 81684

\*81684\*

Page 2

March-16-12 1:58:56 PM

Item ID: D5957

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Saddle, 205

Start Date: 16/03/2012 Start Qty: 6.00

\*6\*

Cust Item ID:

Required Date: 22/03/2012 Req'd Qty: 6.00

\*6\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description                     | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130                            | Chemical Conversion Coat per QSI005 4.1      | 0.00                 |         |        |              | 8             |               |                  |                |
| *130*                          |  |                      |         |        |              |               |               |                  |                |
| HandFinish                     | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Hand Finishing                 |  |                      |         |        |              |               |               |                  |                |
| 140                            | White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum | 0.00                 |         |        |              | 8             | 2             |                  |                |
| *140*                          |  |                      |         |        |              |               |               |                  |                |
| Powdercoat                     | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Powder Coating                 | START TIME: 11h25                            | OVEN TEMPERATURE:    |         |        |              |               |               |                  |                |
|                                | 320°F FINISH TIME: 11h55                     |                      |         |        |              |               |               |                  |                |
|                                | Memo 222                                     |                      |         |        |              |               |               |                  |                |
| 150                            | QC3- Inspect Part Finish                     | 0.00                 |         |        |              | 8             | φ             |                  |                |
| *150*                          |  |                      |         |        |              |               |               |                  |                |
| QC                             | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |  |                      |         |        |              |               |               |                  |                |

8 76 12-6-25

8 2 @ 12/05/25

8 φ BL 12-5-25

Work Order ID 81684

\*81684\*

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March-16-12 1:58:56 PM

Item ID: D5957

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Saddle, 205

Start Date: 16/03/2012 Start Qty: 6.00

\*6\*

Cust Item ID:

Required Date: 22/03/2012 Req'd Qty: 6.00

\*6\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan Accept Reject Reject Insp.  
Code Qty Qty Number Stamp

160

Identify as per dwg & Stock Location: 430

0.00

\*160\*

Packaging

Memo

0.00

Packaging

170

QC21- Final Inspection - Work Order Release

0.00

\*170\*

QC

Memo

0.00

Quality Control

80 12/6/2654

12/6/2654

R120624

# Picklist Print

Page 1

March-16-12 1:59:03 PM

Work Order ID: 81684

\*81684\*

Parent Item: D5957

\*D5957\*

Parent Item Name: Saddle, 205

Start Date: 16/03/2012

Required Date: 22/03/2012

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:E Re-Format 05-11-29 JLM  
IPP Rev:F ecn826 06.12.06 ec

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D6101-007                       |                        | Manufactured  | No          |                     |                  | 110             | Each               | 53.0000        | 1           | 6            |               |                |        |

\*D6101-007\*

\*\*

Saddle Billet

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| MAT042   | 48      |          |
| 79589    | 20      |          |
| 79875    | 28      |          |
| MAT045   | 5       |          |
| 70680    | 3       |          |
| 76839    | 2       |          |

83450 X 8 smk 12/06/20

|                                      |  |                     |                    |
|--------------------------------------|--|---------------------|--------------------|
| <b>DART AEROSPACE LTD</b>            |  | <b>Work Order:</b>  | 81684              |
| <b>Description:</b> Inner Aft Saddle |  | <b>Part Number:</b> | D5957              |
| <b>Inspection Dwg:</b> D5957         |  | <b>Rev:</b> B       | <b>Page 1 of 1</b> |

Inspect dimensions highlighted on inspection sheet drawing and record below:

| Dim           | Min   | Max   | Go/No Go Gauge | Recorded Actual Dimensions |       |       |       | By | Date |
|---------------|-------|-------|----------------|----------------------------|-------|-------|-------|----|------|
|               |       |       |                | 1                          | 2     | 3     | 4     |    |      |
| A             | 0.438 | 0.443 |                | 0.440                      | 0.440 | 0.440 | 0.440 |    |      |
| B             | 1.745 | 1.755 |                | 1.750                      | 1.750 | 1.750 | 1.750 |    |      |
| C             | 5.245 | 5.255 |                | 5.250                      | 5.250 | 5.250 | 5.250 |    |      |
| D             | 6.995 | 7.005 |                | 7.000                      | 7.000 | 7.000 | 7.000 |    |      |
| E             | 5.240 | 5.260 |                | 5.250                      | 5.250 | 5.250 | 5.250 |    |      |
| F             | 4.745 | 4.755 |                | 4.750                      | 4.750 | 4.750 | 4.750 |    |      |
| G             | 0.315 | 0.322 |                | 0.319                      | 0.319 | 0.319 | 0.319 |    |      |
| H             | 1.522 | 1.532 |                | 1.527                      | 1.527 | 1.527 | 1.527 |    |      |
| I             | 3.048 | 3.058 |                | 3.053                      | 3.053 | 3.053 | 3.053 |    |      |
| J             | 4.575 | 4.585 |                | 4.580                      | 4.580 | 4.580 | 4.580 |    |      |
| K             | 0.315 | 0.322 |                | 0.319                      | 0.319 | 0.319 | 0.319 |    |      |
| L             | 0.495 | 0.505 |                | 0.500                      | 0.500 | 0.500 | 0.500 |    |      |
| M             | 0.490 | 0.510 |                | 0.500                      | 0.500 | 0.500 | 0.500 |    |      |
| N             | 1.865 | 1.885 |                | 1.875                      | 1.875 | 1.875 | 1.875 |    |      |
| O             | 7.990 | 8.010 |                | 8.000                      | 8.000 | 8.000 | 8.000 |    |      |
| P             | 2.240 | 2.260 |                | 2.250                      | 2.250 | 2.250 | 2.250 |    |      |
| Q             | 0.308 | 0.313 |                | 0.310                      | 0.310 | 0.310 | 0.310 |    |      |
| R             | 0.760 | 0.765 |                | 0.760                      | 0.760 | 0.760 | 0.760 |    |      |
| S             | 0.490 | 0.510 |                | 0.490                      | 0.490 | 0.500 | 0.500 |    |      |
| T             | 1.625 | 1.645 |                | 1.630                      | 1.630 | 1.630 | 1.630 |    |      |
| U             | 2.000 | 2.020 |                | 2.004                      | 2.004 | 2.004 | 2.004 |    |      |
| V             | 0.023 | 0.043 |                | 0.033                      | 0.033 | 0.033 | 0.033 |    |      |
| W             |       |       |                |                            |       |       |       |    |      |
| X             |       |       |                |                            |       |       |       |    |      |
| Y             |       |       |                |                            |       |       |       |    |      |
| Z             |       |       |                |                            |       |       |       |    |      |
| AA            |       |       |                |                            |       |       |       |    |      |
| AB            |       |       |                |                            |       |       |       |    |      |
| AC            |       |       |                |                            |       |       |       |    |      |
| AD            |       |       |                |                            |       |       |       |    |      |
| AE            |       |       |                |                            |       |       |       |    |      |
| AF            |       |       |                |                            |       |       |       |    |      |
| Accept/Reject |       |       |                |                            |       |       |       |    |      |

|                         |                       |
|-------------------------|-----------------------|
| Measured by: <u>R.A</u> | Audited by: <u>mf</u> |
| Date: <u>12/06/21</u>   | Date: <u>12/06/24</u> |

| Rev | Date     | Change   | Revised by | Approved |
|-----|----------|--|------------|----------|
| A   | 99.04.19 | New Issue  | RF         |          |
| B   | 02.12.13 | Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B | KJ/RF      |          |
| C   | 06.11.20 | Added dimension V                                      | KJ/JLM     |          |
| D   | 06.12.06 | Dimensions L,N,P revised                               | KJ/EC      |          |
| E   | 07.06.15 | Dimension G revised                                    | KJ/JLM     |          |
| F   | 08.04.21 | Dimension E revised                                    | KJ/DD      |          |
| G   | 08.09.05 | Dimension K revised                                    | KJ/DD      |          |
| H   | 09.07.29 | Dimension Q revised                                    | KJ         |          |

|                                      |               |                     |       |
|--------------------------------------|---------------|---------------------|-------|
| <b>DART AEROSPACE LTD</b>            |               | <b>Work Order:</b>  | 81284 |
| <b>Description:</b> Inner Aft Saddle |               | <b>Part Number:</b> | D5957 |
| <b>Inspection Dwg:</b> D5957         | <b>Rev:</b> B | <b>Page 1 of 1</b>  |       |

Inspect dimensions highlighted on inspection sheet drawing and record below:

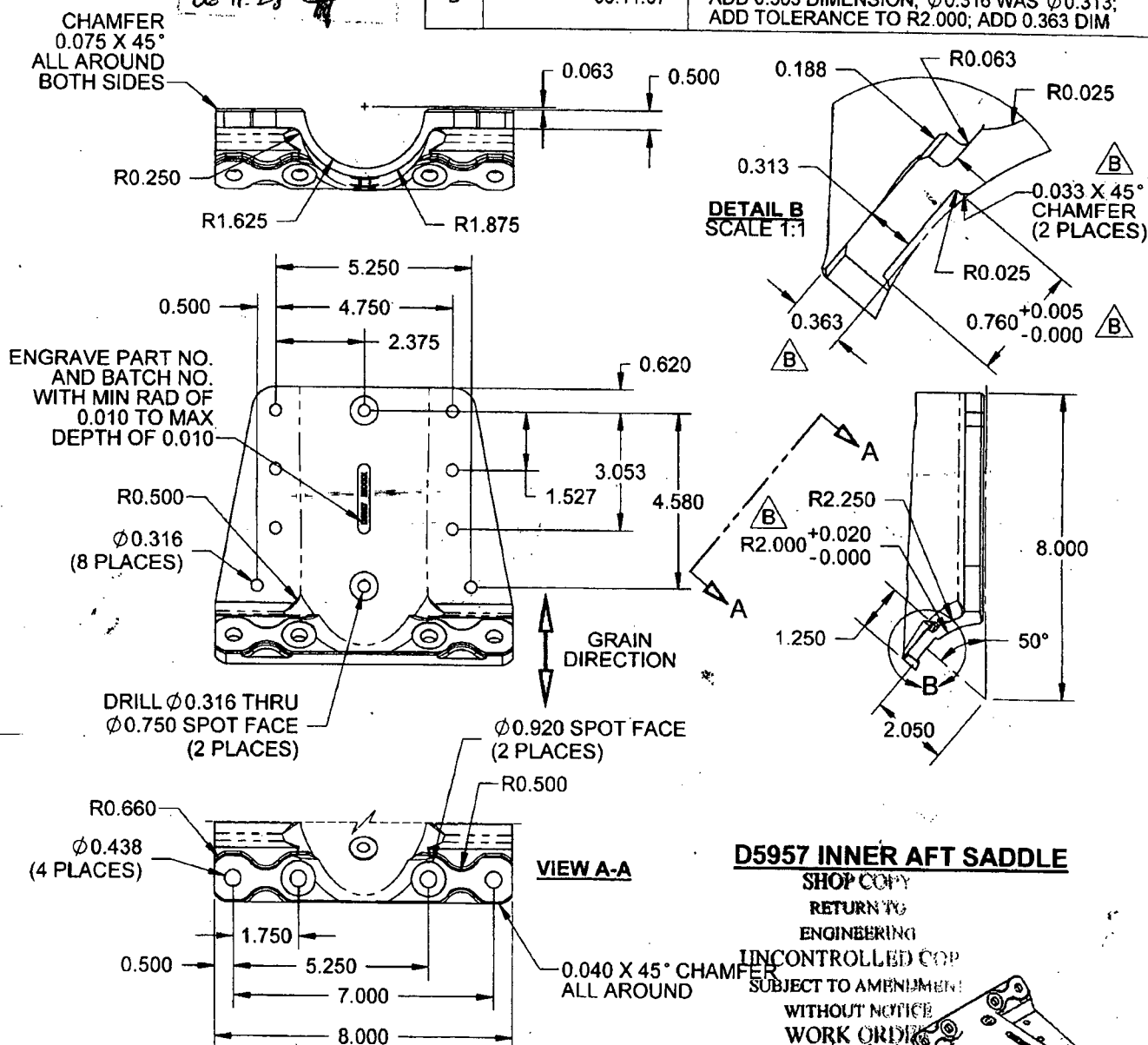
| Dim           | Min   | Max   | Go/No Go Gauge | Recorded Actual Dimensions |       |       |       | By | Date |
|---------------|-------|-------|----------------|----------------------------|-------|-------|-------|----|------|
|               |       |       |                | 1                          | 2     | 3     | 4     |    |      |
| A             | 0.438 | 0.443 |                | 0.440                      | 0.440 | 0.440 | 0.440 |    |      |
| B             | 1.745 | 1.755 |                | 1.750                      | 1.750 | 1.750 | 1.750 |    |      |
| C             | 5.245 | 5.255 |                | 5.250                      | 5.250 | 5.250 | 5.250 |    |      |
| D             | 6.995 | 7.005 |                | 7.000                      | 7.000 | 7.000 | 7.000 |    |      |
| E             | 5.240 | 5.260 |                | 5.250                      | 5.250 | 5.250 | 5.250 |    |      |
| F             | 4.745 | 4.755 |                | 4.750                      | 4.750 | 4.750 | 4.750 |    |      |
| G             | 0.315 | 0.322 |                | 0.319                      | 0.319 | 0.319 | 0.319 |    |      |
| H             | 1.522 | 1.532 |                | 1.527                      | 1.527 | 1.527 | 1.527 |    |      |
| I             | 3.048 | 3.058 |                | 3.053                      | 3.053 | 3.053 | 3.053 |    |      |
| J             | 4.575 | 4.585 |                | 4.580                      | 4.580 | 4.580 | 4.580 |    |      |
| K             | 0.315 | 0.322 |                | 0.319                      | 0.319 | 0.319 | 0.319 |    |      |
| L             | 0.495 | 0.505 |                | 0.500                      | 0.500 | 0.500 | 0.500 |    |      |
| M             | 0.490 | 0.510 |                | 0.500                      | 0.500 | 0.500 | 0.500 |    |      |
| N             | 1.865 | 1.885 |                | 1.875                      | 1.875 | 1.875 | 1.875 |    |      |
| O             | 7.990 | 8.010 |                | 8.000                      | 8.000 | 8.000 | 8.000 |    |      |
| P             | 2.240 | 2.260 |                | 2.250                      | 2.250 | 2.250 | 2.250 |    |      |
| Q             | 0.308 | 0.313 |                | 0.310                      | 0.310 | 0.310 | 0.310 |    |      |
| R             | 0.760 | 0.765 |                | 0.760                      | 0.760 | 0.760 | 0.760 |    |      |
| S             | 0.490 | 0.510 |                | 0.500                      | 0.500 | 0.500 | 0.500 |    |      |
| T             | 1.625 | 1.645 |                | 1.630                      | 1.630 | 1.632 | 1.630 |    |      |
| U             | 2.000 | 2.020 |                | 2.004                      | 2.004 | 2.004 | 2.004 |    |      |
| V             | 0.023 | 0.043 |                | 0.033                      | 0.033 | 0.033 | 0.033 |    |      |
| W             |       |       |                |                            |       |       |       |    |      |
| X             |       |       |                |                            |       |       |       |    |      |
| Y             |       |       |                |                            |       |       |       |    |      |
| Z             |       |       |                |                            |       |       |       |    |      |
| AA            |       |       |                |                            |       |       |       |    |      |
| AB            |       |       |                |                            |       |       |       |    |      |
| AC            |       |       |                |                            |       |       |       |    |      |
| AD            |       |       |                |                            |       |       |       |    |      |
| AE            |       |       |                |                            |       |       |       |    |      |
| AF            |       |       |                |                            |       |       |       |    |      |
| Accept/Reject |       |       |                |                            |       |       |       |    |      |

|                          |                       |
|--------------------------|-----------------------|
| Measured by: <u>B.A.</u> | Audited by: <u>AM</u> |
| Date: <u>12/06/22</u>    | Date: <u>12/06/24</u> |

| Rev | Date     | Change   | Revised by | Approved |
|-----|----------|--|------------|----------|
| A   | 99.04.19 | New Issue  | RF         |          |
| B   | 02.12.13 | Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B | KJ/RF      |          |
| C   | 06.11.20 | Added dimension V                                      | KJ/JLM     |          |
| D   | 06.12.06 | Dimensions L,N,P revised                               | KJ/EC      |          |
| E   | 07.06.15 | Dimension G revised                                    | KJ/JLM     |          |
| F   | 08.04.21 | Dimension E revised                                    | KJ/DD      |          |
| G   | 08.09.05 | Dimension K revised                                    | KJ/DD      |          |
| H   | 09.07.29 | Dimension Q revised                                    | KJ         |          |



| DESIGN<br><b>BW</b>     | DRAWN BY<br><b>CB</b>            | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |                        |
|-------------------------|----------------------------------|---|------------------------|
| CHECKED<br><b>LE</b>    | APPROVED<br><b>[Signature]</b>   | DRAWING NO.<br><b>D5957</b>   | REV. B<br>SHEET 1 OF 1 |
| DATE<br><b>06.11.07</b> | TITLE<br><b>INNER AFT SADDLE</b> | SCALE<br>1:4  |                        |
| REV                     | DATE                             | DESCRIPTION   |                        |
| A                       | 97.05.06                         | NEW ISSUE   |                        |
| B                       | 06.11.07                         | INCORPORATE DEO 9102, DEO 9079;<br>ADD 0.363 DIMENSION; $\phi 0.316$ WAS $\phi 0.313$ ;<br>ADD TOLERANCE TO R2.000; ADD 0.363 DIM |                        |



# NOTES:

- 1) MATERIAL: ALUMINUM 7075-T7351 PER QQ-A-250/12  
(MAKE FROM D6101-007 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.010 TO 0.020

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**Work Order ID 83450****\*83450\***

Page 1

Wednesday, April 18, 2012 8:42:47 AM

Item ID: D6101-007

Accept

**\*N9000040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Saddle Billet

Start Date: 4/18/2012 Start Qty: 30.00

**\*30\***

Cust Item ID:

Required Date: 4/25/2012 Req'd Qty: 30.00

**\*30\***

Customer:

Reference:

Run Start **\*NR1\***Approvals: Process Plan: MLJ Date: 12/04/18 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_Stop **\*NR2\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

| Sequence ID/<br>Work Center ID | Operation<br>Description                           | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr                       | Revision Nbr                                       |                      |         |        |              |               |               |                  |                |
| D6101                          | Rev B  |                      |         |        |              |               |               |                  |                |
| 100                            | PURCHASING   | 0.00                 |         |        |              |               |               |                  |                |
| <b>*100*</b>                   |  |                      |         |        |              |               |               |                  |                |
| Purchasing                     | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Purchasing                     | Issue P/O: <u>16754</u>                            |                      |         |        |              |               |               |                  |                |
|                                | a) Description: Alluminum billet                   |                      |         |        |              |               |               |                  |                |
|                                | b) 7.750" x 8.250" x 2.50" thick                   |                      |         |        |              |               |               |                  |                |
|                                | c) Tolerance on all dimensions are +0.030"/-0.000" |                      |         |        |              |               |               |                  |                |
|                                | d) Grain direction along 7.750" length             |                      |         |        |              |               |               |                  |                |
|                                | e) Material: 7075-T7351 (QQ-A-250/12)              |                      |         |        |              |               |               |                  |                |
|                                | f) Material certification required                 |                      |         |        |              |               |               |                  |                |
| 110                            | Receive & Inspect for Damage & Mat'l Certs         | 0.00                 |         |        |              |               |               |                  |                |
| <b>*110*</b>                   |  |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      | Ensure material certification is attached          |                      |         |        |              |               |               |                  |                |

12-04-1812/04/18 (3)



# Work Order ID 83450

**\*83450\***

Page 2

Wednesday, April 18, 2012 8:42:47 AM

Item ID: D6101-007 Accept **\*N9000040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Saddle Billet  
 Start Date: 4/18/2012 Start Qty: 30.00 **\*30\*** Cust Item ID:  
 Required Date: 4/25/2012 Req'd Qty: 30.00 **\*30\*** Customer:

## Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***  
 Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                            | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120                            | QC6- Inspect dimensions to drawing                  | 0.00                 |         |        |              |               |               |                  |                |
| <b>*120*</b>                   |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                | Ensure Material certification comply to Dwg D6101   |                      |         |        |              |               |               |                  |                |
| 130                            | Identify as per dwg & Stock Location: <u>MAT 41</u> | 0.00                 |         |        |              |               |               |                  |                |
| <b>*130*</b>                   |   |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      |   |                      |         |        |              |               |               |                  |                |
| 140                            | QC21- Final Inspection - Work Order Release         | 0.00                 |         |        |              |               |               |                  |                |
| <b>*140*</b>                   |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |

12/5/12  
 1205-3

# Picklist Print

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Wednesday, April 18, 2012 8:42:52 AM

Work Order ID: 83450

\*83450\*

Parent Item: D6101-007

\*D6101-007\*

Parent Item Name: Saddle Billet

Start Date: 4/18/2012

Required Date: 4/25/2012

Start Qty: 30.00

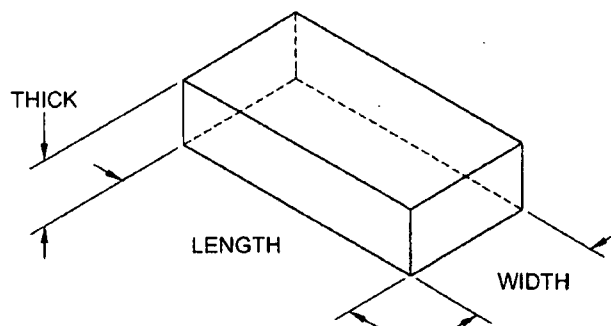
Required Qty: 30.00

Comments: IPP A: 01.05.04New IssueEC

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D6101-007P                      |                        | Purchased     | No          |                     |                  | 110             | Each               | 0.0000         | 1           | 30           |               |                |        |
| *D6101-007P*                    |                        |               |             |                     |                  |                 |                    |                | **          |              |               |                |        |
| 7075-T7351 8.25X7.75X2.5        |                        |               |             |                     |                  |                 |                    |                |             |              |               |                |        |

4/25/01 (30)

# SPECIFICATION CONTROL DRAWING



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

**B** ACCEPTABLE SPECIFICATIONS FOR 7075-T7351 ALUMINUM ARE AMS-QQ-A-250/12, QQ-A-250/12, OR ASTM B209

| Part No.  | Alloy                    | Length | Width | Thick | Grain Direction    |
|-----------|--------------------------|--------|-------|-------|--------------------|
| D6101-001 | 7075-T7351 (QQ-A-250/12) | 6.000  | 6.250 | 2.000 | Along 6.000 Length |
| D6101-003 | 7075-T7351 (QQ-A-250/12) | 7.875  | 6.250 | 2.000 | Along 7.875 Length |
| D6101-005 | 7075-T7351 (QQ-A-250/12) | 5.000  | 8.250 | 2.500 | Along 5.000 Length |
| D6101-007 | 7075-T7351 (QQ-A-250/12) | 7.750  | 8.250 | 2.500 | Along 7.750 Length |
| D6101-009 | 7075-T7351 (QQ-A-250/12) | 8.700  | 8.250 | 2.500 | Along 8.700 Length |
| D6101-011 | 7075-T7351 (QQ-A-250/12) | 9.700  | 8.250 | 2.500 | Along 9.700 Length |
| D6101-013 | 7075-T7351 (QQ-A-250/12) | 10.100 | 8.250 | 2.500 | Along 10.10 Length |
| D6101-015 | 7075-T7351 (QQ-A-250/12) | 9.450  | 6.250 | 2.500 | Along 9.450 Length |
| D6101-017 | 7075-T7351 (QQ-A-250/12) | 6.350  | 6.250 | 2.250 | Along 6.350 Length |
|           |                          |        |       |       |                    |
|           |                          |        |       |       |                    |

**B**

**RELEASED**  
09/07/15/WP

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 WORK ORDER  
 NO. 83450-465  
 12/04/18

|            |                                     |   |              |
|------------|-------------------------------------|---|--------------|
| B          | ADDED D6101-015/-017, ADD ASTM B209 | RF  | 09.04.23     |
| A          | NEW ISSUE                           | CP  | 01.03.30     |
| REV.       | DESCRIPTION                         | BY  | DATE         |
| DESIGN     | CP                                  | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |              |
| DRAWN      | RF                                  |   |              |
| CHECKED    | <i>[Signature]</i>                  | DRAWING NO.   | REV. B       |
| MFG. APPR. | <i>[Signature]</i>                  | D6101   | SHEET 1 OF 1 |
| APPROVED   | <i>[Signature]</i>                  | TITLE   | SCALE        |
| DE APPR.   | <i>[Signature]</i>                  | SADDLE BILLET, 7075   | NTS          |
| DATE       | 09.04.23                            | <small>                     COPYRIGHT © 2001 BY DART AEROSPACE LTD<br/>                     THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS<br/>                     NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT<br/>                     WRITTEN PERMISSION FROM DART AEROSPACE LTD.                 </small> |              |

**Castle Metals®**

A. M. Castle &amp; Co.

## BORDEREAU DE MARCHANDISES

Page 1 of 2

No de Formulaire d'Emballage / Shipment No: 1289214

|   |  |  |  |   |  |  |  |  |  |
|---|--|--|--|---|--|--|--|--|--|
| <b>Expédié de / Ship From:</b><br>A. M. Castle & Co. (Canada)<br>Inc.<br>MONTREAL<br>835-SELKIRK AVENUE<br>POINTE CLAIRE, QUEBEC<br>H9R 3S2 |  | <b>Vendu à / Sold To:</b><br>DART AEROSPACE LTD<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A 1K7<br>CA |  | <b>Expédié à / Ship To:</b><br>WILL CALL-MONTREAL<br>1270 ABERDEEN<br>HAWKESBURY, ON K6A<br>1K7 CAN |  | <b>Livré à / Deliver To:</b><br>WILL CALL-MONTREAL<br>835 SELKIRK AVENUE<br>POINTE CLAIRE, QC<br>H9R 3S2<br>CA |  |  |  |
| <b>Date d'expédition / Date Shipped</b><br>27-APR-2012  |  | <b>F.O.B.</b><br>ORIGIN  |  | <b>Modalités de transport / Freight Terms</b><br>Prepaid  |  | <b>Transporteur / Carrier</b><br>MANITOULIN  |  | <b>No du Bon de connaissance / BOL No</b><br>1289214-2 |  |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| <b>Détails d'expédition / Shipment Details</b> |  |  |  | <b>Destination finale / Final Destination Branch - MON</b> |  |
|--|--|--|--|--|--|

| N° de commande / Order No                                 | N° de ligne / Line No | N° d'article / Item No  | Description   |
|---|-----------------------|---|---|
| 2146371   | 2                     | 752241.MO   | 2.5000.PL.7075.T7351.ALUMINUM.USI.48.5000.144.5000 CUT 2SIDED TO 8.25 IN ( + .0310/- .0000 IN (GRAIN TO RUN ALONG 7.75")) X 7.75 IN ( + .0310/- .0000 IN (GRAIN TO RUN ALONG 7.75")) - ALUMINUM PLATE SAW SPECIFICATIONS: AMS-QQ-A-250/12 |
| <b>N° de bon de commande / Purchase Order No</b><br>16754 |                       | <b>Nbre de pièces / Part Number</b><br>YOUR ITEM NUMBER:<br>D6101-007 |   |
|   |                       | <b>Qté commandée / Ordered Qty</b><br>30.00 PCS                       | <b>Qté Facturée / Invoice Qty</b><br>30.0000 PCS  |

| <b>Détails / Details</b>               |                     | <b>N° de coulée / Heat Number</b> | <b>Code méc / Mech Id</b> | <b>Pièces / PCS</b> | <b>Largeur (Pouce) / Width (IN)</b> | <b>Longueur (Pouce) / Length (IN)</b> | <b>Qté expédiée / Shipped Qty(LBS)</b> |
|--|---------------------|-----------------------------------|---------------------------|---------------------|-------------------------------------|---------------------------------------|--|
| <b>N° de livraison / Delivery No :</b> | <b>Usine / Mill</b> |                                   |                           |                     |                                     |                                       |  |
| 117574302                              |                     | 467299A4                          |                           | 9                   | (3)                                 |                                       | 148.79                                 |
| 117574302                              |                     | 405872A3                          |                           | 9                   |                                     | 148.79                                |  |
| 117574302                              |                     | 436191                            |                           | 12                  |                                     | 198.38                                |  |

Ces marchandises/technologies sont sujettes aux règlements de l'Export Administration et du département d'état des États-Unis. Si elles ont été/sont exportées, elles doivent se conformer à ces règlements. Toute modification du contrat de transport contraire aux lois des États-Unis est interdite. *These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.*

Nous certifions par la présente que le matériel couvert par cette certification est conforme aux spécifications susmentionnées et aux exigences applicables pour le matériel, y compris toute spécification faisant partie de la description. Les rapports d'

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## SHIP TO:

CASTLE METALS AEROSPACE  
4175 ROYAL DRIVE, SUITE 600  
KENNESAW, GA 30144

# KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number

4160783

## SOLD TO:

CAS AERO% A M CASTLE METALS  
ATTN:BOB OHR % ACCTS PAYABLES  
3400 NORTH WOLF RD  
FRANKLIN PARK, IL 60131

|                             |                         |                           |  |                     |                                |   |
|-----------------------------|-------------------------|---------------------------|--|---------------------|--------------------------------|---|
| CUSTOMER PO NUMBER:<br>7748 |                         | WORK PACKAGE:             | CUSTOMER PART NUMBER:<br>752241 AMC CA-15745 |                     | SHIP RUN/LOAD ID:<br>101523/21 | GOV'T CONTRACT NUMBER:                    |
| KAISER ORDER NO:<br>1080685 | LINE ITEM:<br>1         | SHIP DATE:<br>23-APR-2009 | ALLOY:<br>7075                               | CLAD:<br>BARE       | TEMPER:<br>T7351               | PRODUCT DESCRIPTION:<br>MILL FINISH PLATE |
| WEIGHT SHIPPED:<br>8988 LB  | QUANTITY:<br>5 PCS EST. | B/L NUMBER:<br>2022418    | GAUGE:<br>2.5000 IN                          | WIDTH:<br>48.500 IN | LENGTH:<br>144.500 IN          |   |

### Certified Specifications

AMS 4078/RevG  
ASTM B 209/Rev07  
BSS 7055/RevA  
DPS 4.713/RevAH  
GSS16100/RevG/Amd1

AMS-QQ-A-250/12  
ASTM B 594/Rev06  
CMMP 025/RevR  
EAC MS1011/RevE  
MMS 159/RevN

AMS-STD-2154  
BAC 5439/RevH  
CSTI 006/RevC  
GAMPS 9101/RevB  
PS 21211/RevK

### Test Results

Test Code: 4297

Lot: 467299A4 Cast 222

Drop 18

Ingot 1

(ASTM E8/B557)  
(EN 2002-1)

Tensile: Temper  
T7351

Dir / # Tests  
LT / 2 (Min:Max)

Ultimate KSI (MPA)  
72.8 : 73.0  
(502 : 503)

Yield KSI (MPA)  
61.3 : 61.5  
(423 : 424)

Elongation %  
11.1 : 11.1



(ASTM E1004)  
(EN 2004-1)

Conductivity %IACS : 40.6 Min  
(MS/M) : 23.5 Min

40.8 Max  
23.7 Max

## RECEIVED

APR 27 2009

(ASTM E1251)

Chemistry:  
Actual

SI  
0.10

FE  
0.20

CU  
1.5

MN  
0.02

MG  
2.5

CR  
0.20

ZN  
5.7

TI  
0.04

V  
0.01

ZR  
0.01

OTHER  
TOT 0.05

# KAISER

## ALUMINUM

Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

### CERTIFIED TEST REPORT

Serial Number  
4160783

Lot: 470001A9 Cast 222 Drop 27 Ingot 2

(ASTM E8/B557)  
(EN 2002-1)

| Tensile: | Temper | Dir / # Tests    | Ultimate KSI (MPA)         | Yield KSI (MPA)            | Elongation % |
|----------|--------|------------------|----------------------------|----------------------------|--------------|
|          | T7351  | LT / 2 (Min:Max) | 72.4 : 74.4<br>(499 : 513) | 60.3 : 63.3<br>(416 : 436) | 11.1 : 11.2  |

(ASTM E1004)

(EN 2004-1)

|                      |          |          |
|----------------------|----------|----------|
| Conductivity %IACS : | 39.8 Min | 41.6 Max |
| (MS/M) :             | 23.1 Min | 24.1 Max |

(ASTM E1251)

| Chemistry: | SI   | FE   | CU  | MN   | MG  | CR   | ZN  | TI   | V    | ZR   | OTHER    |
|------------|------|------|-----|------|-----|------|-----|------|------|------|----------|
| Actual     | 0.09 | 0.19 | 1.5 | 0.02 | 2.5 | 0.20 | 5.8 | 0.04 | 0.01 | 0.01 | TOT 0.05 |

Lot: 470010A0 Cast 222 Drop 29 Ingot 3

(ASTM E8/B557)  
(EN 2002-1)

| Tensile: | Temper | Dir / # Tests    | Ultimate KSI (MPA)         | Yield KSI (MPA)            | Elongation % |
|----------|--------|------------------|----------------------------|----------------------------|--------------|
|          | T7351  | LT / 2 (Min:Max) | 72.7 : 74.4<br>(501 : 513) | 60.7 : 63.7<br>(419 : 439) | 10.7 : 11.2  |

(ASTM E1004)

(EN 2004-1)

|                      |          |          |
|----------------------|----------|----------|
| Conductivity %IACS : | 40.8 Min | 41.2 Max |
| (MS/M) :             | 23.7 Min | 23.9 Max |

(ASTM E1251)

| Chemistry: | SI   | FE   | CU  | MN   | MG  | CR   | ZN  | TI   | V    | ZR   | OTHER    |
|------------|------|------|-----|------|-----|------|-----|------|------|------|----------|
| Actual     | 0.09 | 0.20 | 1.5 | 0.03 | 2.4 | 0.20 | 5.6 | 0.04 | 0.01 | 0.01 | TOT 0.05 |

#### ALLOY LIMITS

| Chemistry: | SI   | FE   | CU  | MN   | MG  | CR   | ZN  | TI   | V    | ZR   | OTHER | MAX  |
|------------|------|------|-----|------|-----|------|-----|------|------|------|-------|------|
| 7075 MIN   | 0.00 | 0.00 | 1.2 | 0.00 | 2.1 | 0.18 | 5.1 | 0.00 | 0.00 | 0.00 | EACH  | 0.05 |
| MAX        | 0.40 | 0.50 | 2.0 | 0.30 | 2.9 | 0.28 | 6.1 | 0.20 | 0.05 | 0.05 | TOT   | 0.15 |

Aluminum Remainder

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APR 27 2009



**KAISER  
ALUMINUM**

Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

**CERTIFIED TEST REPORT**

Serial Number  
4160783

**TEST NOTES**

7075-T7351 plate 3.001-3.500" thick, if ultrasonically inspected, meets requirements of CMMPO25 per SDR CMMPO25-KaiserT-1. 7075-T7351 plate 3.501-5.000" thick, if ultrasonically inspected, meets requirements of CMMPO25 per SDR CMMPO25-KaiserT-2.

Metal represented by this test report was immersion ultrasonically tested from one side and meets the Class A and Class B requirements of all specifications referenced on this test report.



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APR 27 2009

**CERTIFICATION**

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE UNITED STATES OF AMERICA OR A QUALIFYING COUNTRY PER DFARS 225.872-1(a), WAS MANUFACTURED IN THE UNITED STATES OF AMERICA, AND MEETS THE REQUIREMENTS OF DFARS 252.225 FOR DOMESTIC CONTENT. THIS MATERIAL HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED.

**BILL POYNOR, LABORATORIES SUPERVISOR**

## SHIP TO:

TRANSTAR METALS  
4611 EAST 31ST STREET  
WICHITA, KS 67210

# KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

## CERTIFIED TEST REPORT

## SOLD TO:

TRANSTAR METALS INC.  
ATTN: ACCOUNTS PAYABLE DEPT.  
970 W. 190TH STREET  
SUITE 700  
TORRANCE, CA 90502

Serial Number

4125515

|                                 |                         |                           |                     |                                      |                     |   |  |                        |  |
|---------------------------------|-------------------------|---------------------------|---------------------|--------------------------------------|---------------------|---|--|------------------------|--|
| CUSTOMER PO NUMBER:<br>00144136 |                         | WORK PACKAGE:             |                     | CUSTOMER PART NUMBER:<br>152500X557L |                     | SHIP RUN/LOAD ID:<br>101252/7             |  | GOV'T CONTRACT NUMBER: |  |
| KAISER ORDER NO:<br>1064442     | LINE ITEM:<br>1         | SHIP DATE:<br>31-MAR-2008 | ALLOY:<br>7075      | CLAD:<br>BARE                        | TEMPER:<br>T7351    | PRODUCT DESCRIPTION:<br>MILL FINISH PLATE |  |                        |  |
| WEIGHT SHIPPED:<br>13660 LB     | QUANTITY:<br>6 PCS EST. | B/L NUMBER:<br>2017102    | GAUGE:<br>2.5000 IN |                                      | WIDTH:<br>55.000 IN | LENGTH:<br>161.000 IN                     |  |                        |  |

### Certified Specifications

AMS 4078/RevG  
ASTM B 209/Rev07  
BSS 7055/RevA  
GSS16100/RevG  
PS 21211/RevK

AMS-QQ-A-250/12  
ASTM B 594/Rev06  
CSTI 006/RevC  
MIL-STD-2154

AMS-STD-2154  
BAC 5439/RevH  
DPS 4.713/RevAH  
MMS 159/RevN

### Test Results

Test Code: 4297

Lot: 405872A3 Cast 158

Drop 05

Ingot 4

(ASTM E8/B557)

Tensile: Temper  
T7351

Dir / # Tests

LT / 2 (Min:Max)

Ultimate KSI (MPA)

70.0 : 71.9

(483 : 496)

Yield KSI (MPA)

58.3 : 60.7

(402 : 419)

Elongation %

8.1 : 10.1

(ASTM E1004)

Conductivity %IACS :

(MS/M) :

40.7 Min

23.6 Min

41.2 Max

23.9 Max

(ASTM E1251)

Chemistry:

Actual

SI

0.10

FE

0.20

CU

1.5

MN

0.02

MG

2.5

CR

0.20

ZN

5.6

TI

0.03

V

0.01

ZR

0.01

TOT

OTHER

0.03

RECEIVED  
APR 06 2008  
TRANSTAR METALS  
By \_\_\_\_\_



# KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number  
4125515

Lot: 427571A5 Cast 158 Drop 18 Ingot 4

(ASTM E8/B557)

| Tensile: | Temper | Dir / # Tests    | Ultimate KSI (MPA)         | Yield KSI (MPA)            | Elongation % |
|----------|--------|------------------|----------------------------|----------------------------|--------------|
|          | T7351  | LT / 2 (Min:Max) | 71.6 : 72.3<br>(494 : 499) | 60.1 : 61.6<br>(414 : 425) | 11.6 : 11.8  |

(ASTM E1004)

|                      |          |          |
|----------------------|----------|----------|
| Conductivity %IACS : | 41.4 Min | 41.9 Max |
| (MS/M) :             | 24.0 Min | 24.3 Max |

(ASTM E1251)

| Chemistry: | SI   | FE   | CU  | MN   | MG  | CR   | ZN  | TI   | V    | ZR   | OTHER    |
|------------|------|------|-----|------|-----|------|-----|------|------|------|----------|
| Actual     | 0.09 | 0.15 | 1.4 | 0.02 | 2.4 | 0.21 | 5.7 | 0.02 | 0.01 | 0.01 | TOT 0.03 |

### ALLOY LIMITS

| Chemistry: | SI   | FE   | CU  | MN   | MG  | CR   | ZN  | TI   | V    | ZR   | OTHER | MAX  |
|------------|------|------|-----|------|-----|------|-----|------|------|------|-------|------|
| 7075 MIN   | 0.00 | 0.00 | 1.2 | 0.00 | 2.1 | 0.18 | 5.1 | 0.00 | 0.00 | 0.00 | EACH  | 0.05 |
| MAX        | 0.40 | 0.50 | 2.0 | 0.30 | 2.9 | 0.28 | 6.1 | 0.20 | 0.05 | 0.05 | TOT   | 0.15 |

Aluminum Remainder

### TEST NOTES

Metal represented by this test report was immersion  
ultrasonically tested from one side and meets the Class A  
and Class B requirements of all specifications referenced  
on this test report.

### CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND  
MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS  
INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD  
GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL.  
WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS  
OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR



T-504 P041/058 F-466

3165223453

03-13-'09 07:11 FROM-a m castle metals

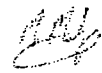
## CERTIFIED INSPECTION REPORT

Alcoa Inc.

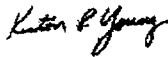
PITTSBURGH, PA DAVENPORT WORKS  
Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per:



Malcolm Murphy  
Director of Manufacturing Davenport Works



Kenton P. Young  
Quality Assurance Manager

|                   |              |             |               |               |      |
|-------------------|--------------|-------------|---------------|---------------|------|
| 1005842           | 0            | Invoice No. | Alcoa No.     | Item          | Page |
| Ship Date         | B.L. No.     | 00000       | 1000076823-1  |               | 1    |
| 2009-03-06        | 3535272      | Customer    | Alcoa Item    | Mfg Order     |      |
| P.O. No./Govt Co. | Contract No. | CASTLE A M  | G041005634R10 | DS-78823-02-1 |      |
| 23-14882          |              |             |               |               |      |

Ship To: A M CASTLE & COMPANY  
3050 SOUTH HYDRAULIC  
WICHITA 67216 KS

## Item Description

2.5 IN TK (+.075 -.075) X 48.5 IN W (+.3125 - 0.000) X 144.5 IN LN (+.5 -0.0) CAT D 164168 (N) A/T 7075- T7351 RECTANGLE MILL FINISH, US1 3MM DEAD ZONE REQ'D BOTH SIDES. SAWED AC 6879 EXC MRK A97075-60 REV 25 AMS-QQ-A-250/12 IS 2007 AMS- STD-2154 EXC MRK AMS4078 REV G EXC MRK ASTM209 REV 07 ASTM594 REV 06 BSS7055 REV A EXC MRK MMS159 REV N PS21211 REV K ((MARKED)) KRAFT PAPER INTERLEAVED MAX GROSS SKID WGT: 4500 LB QUAN TOL +/- 25 % US1 CL A 3 MM CQR 0137890 REV 19 CUST REQ 09-03-06 \*\*\* N/E 09-03-14 \*\*\*

| Num | Package Ticket | Lot    | Weight | Quantity | UOM | Pc Id/Serl |
|-----|----------------|--------|--------|----------|-----|------------|
| 1   | 717895         | 436191 | 3547   | 2        | PC  |            |

Notes for CQR: 0137890.19  
PRODUCT PRODUCED TO THE REQUIREMENTS OF MIL-STD-2154 ALSO MEET THE REQUIREMENTS OF AMS-STD-2154. PRODUCT PRODUCED TO THE REQUIREMENTS OF AMS-STD-2154 ALSO MEET THE REQUIREMENTS OF MIL-STD-2154. THIS MATERIAL HAS BEEN ULTRASONICALLY INSPECTED FULLY IMMERSION - TYPE I. PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF AMS-QQ-A-250/12 ALSO MEETS THE REQUIREMENTS OF QQ-A-250/12F. PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF QQ-A-250/12 F ALSO MEETS THE REQUIREMENTS OF AMS-QQ-A-250/12. THIS MATERIAL HAS BEEN ULTRASONICALLY INSPECTED FULLY IMMERSION - TYPE I.

CQR: 0137890.19 -Specification Limits

| Temp                 | Dir              |              | UTS  |      | TYS  |      | EL4D |      | Other | Other | Total | Aluminum |
|----------------------|------------------|--------------|------|------|------|------|------|------|-------|-------|-------|----------|
|                      |                  |              | KSI  | KSI  | KSI  | KSI  | PCT  | PCT  |       |       |       |          |
| T7351                | Long Transv.     | Max          |      |      | 63.9 |      |      |      |       |       |       |          |
|                      |                  | Min          | 66.0 | 52.0 |      | 6    |      |      |       |       |       |          |
| T7351                | Elec. Cond. (EC) | MIN 38.0 PCT |      |      |      |      |      |      |       |       |       |          |
| Chemical Composition |                  |              | SI   | FE   | CU   | MN   | MG   | CR   | ZN    | TI    | Each  | Total    |
| Alloy 7075           | Max              |              | 0.40 | 0.50 | 2.0  | 0.30 | 2.9  | 0.28 | 6.1   | 0.20  | 0.05  | 0.15     |
|                      | Min              |              |      |      | 1.2  |      | 2.1  | 0.18 | 5.1   |       |       |          |

REMAIN

CASTLE METAL 3-WTC

DATE REC'D 3-9-09  
REC'D FROM 5717  
APPROVED BY CB

03-13-'09 07:11 FROM-a m castle metals

PITTSBURGH, PA      DAVENPORT WORKS  
Ship From:      RIVERDALE, IA.

|                            |            |               |               |      |        |
|----------------------------|------------|---------------|---------------|------|--------|
| 1005842                    | 0          |               |               |      | Page 2 |
| Ship Date                  | B.L. No.   | Invoice No.   | Alcoa No.     | Item |        |
| 2009-03-06                 | 3535272    | 00000         | 1000078023-1  |      |        |
| P.O. No./Govt Contract No. | Customer   | Alcoa Item    | Mfg Order     |      |        |
| 23-14882                   | CASTLE A M | G041005634R10 | DS-78823-02-1 |      |        |

This material was melted in the United States or a Qualifying Country [REF DEARS 225.872.1(a)]; it was manufactured in the United States

